ATEN

Broadcasting & Media

levira

Network Operations Center

Estonia

Levira, Network Operations Center

> " ATEN's remote access solution has not only been reliable and easy to use but has also helped us provide a low noise, comfortable and more productive environment for our employees. "

Dmitri Skakalin
Monitoring Systems Engineer at Levira

About Levira

Headquartered in Tallinn, Estonia, Levira is one of the largest TV playout service providers in northern Europe and the main TV and radio broadcast transmission provider in Estonia. The company also operates one of the biggest data centers in the Baltic countries. Levira is developing a state-of-the-art Network Operations Center (NOC) to manage its key media services, playout and transmission of TV channels to cable TV, data center and cloud services. Once complete, the new NOC will monitor outgoing video signals, environment, equipment health, and the network traffic status of all Levira operations.

The Tallinn TV Tower: Estonia's tallest building

Purpose-built for broadcasting at 314 meters, the Tallinn TV Tower is owned and administered by the telecommunication service provider Levira. Furthermore, the tower is marketed as an international attraction with quality cultural and recreational services on offer for tourists.

The Tallinn TV Tower also houses Levira's Network Operations Center which performs 24/7 monitoring of multiple servers that run critical systems for:

- A playout operations center where the health of video transmissions is monitored
- A security room that oversees the entire installation
- A server room where the surveillance and NOC equipment is installed
- A data center that provides different server hosting services.

Key Customer Requirements

- They require a solution which, aside from monitoring, allows them to control servers when necessary.

- The solution has to ensure an advanced level of security and efficiency that includes remote, yet secure management.

- An expandable solution that allows them to install certain equipment in a separate room away utilizing the existing Ethernet infrastructure.

- Technicians and security personnel need reliable access to dual head DVI microservers, workstations, and NVRs with FullHD 1080p video quality.

To ensure equipment health and non-stop operation, they require a solution which, aside from monitoring, allows them to control these servers when necessary. The center will comply with the highest security and reliability standards, offering rooms and suites, racks and rack units for the servers of private companies and public agencies. The solution has to ensure an advanced level of security and efficiency that includes remote, yet secure management. Also, this easy-to-use centralized management system needs to operate via the existing Ethernet infrastructure. To protect employees from high noise levels and uncomfortable temperatures, Levira also wants an expandable solution that allows them to install certain equipment in a separate room away from the NOC, security room, and the support team that is available for remote troubleshooting.

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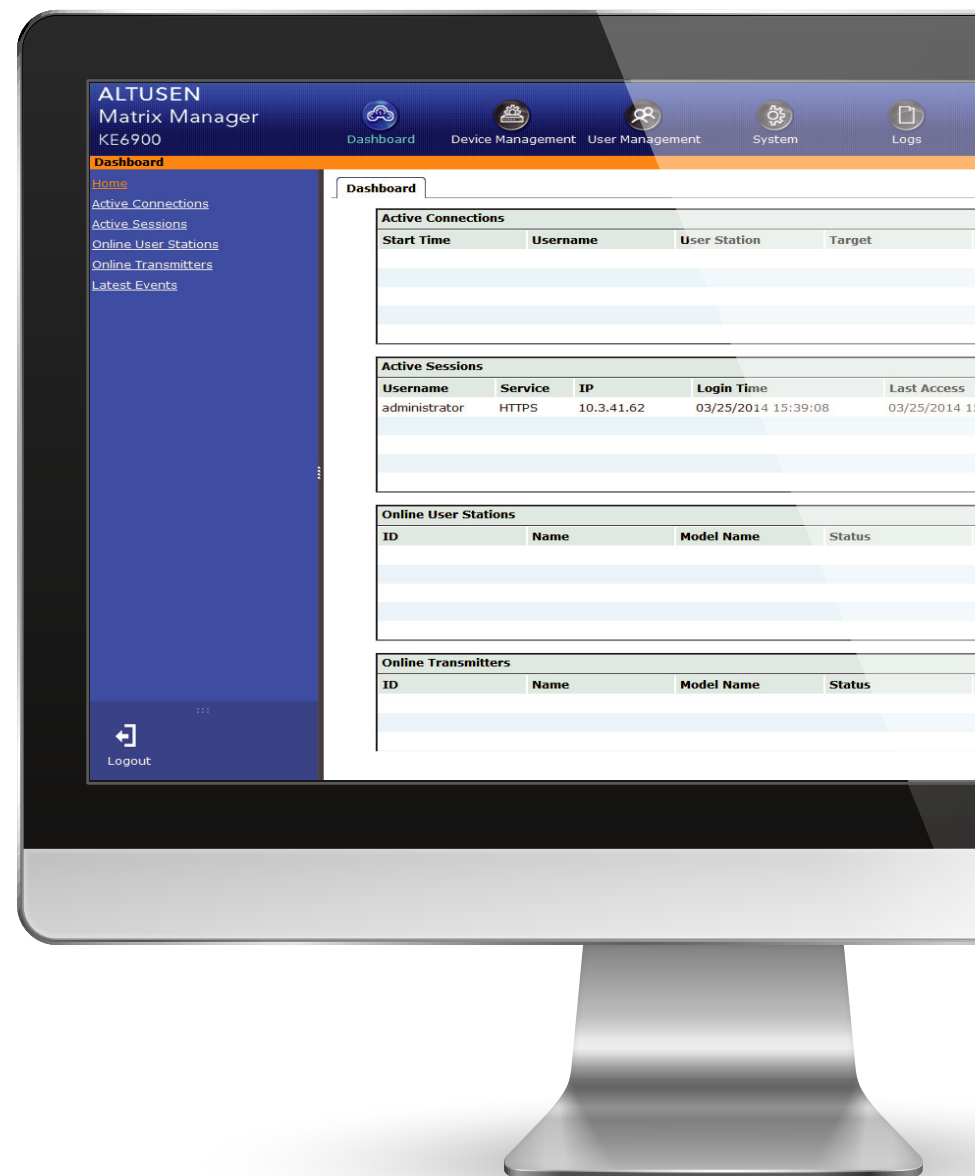
Lastly, technicians and security personnel also need reliable access to dual head DVI microservers, workstations, and NVRs with FullHD 1080p video quality.

The ATEN Solution

- ✓ Simple, centralized access control

- ✓ Future-proof, expandable solution

- ✓ DVI dual-display in Full HD resolution

- ✓ Secure, long distance data transmission

ATEN provided the perfect solution with the new Altusen™ Series of KVM over IP extenders and Matrix Manager software. By integrating twenty pairs of KE6940 with the CCKM Matrix Manager software, the ATEN solution allows a secure and reliable connection to any server or workstation from the distant NOC and security room where critical equipment health information and network traffic status are monitored real-time over multiple displays and troubleshooting tasks performed.

Simple, centralized access control

ATEN's CCKM Matrix Manager software provides the tools to centralize the control and management of KE6900 / 6940 devices. Levira's administrators can set different permissions to meet users' requirements.

Future-proof, expandable solution

One of the many advantages of ATEN's KVM over IP solution is that it provides the management team with the scalability to add additional users and workstations in the future, if needed, utilizing the same IT infrastructure.

DVI dual-display in Full HD resolution

The KE6940 Series IP-based DVI KVM Extender supports two DVI displays at each end, allowing the Network Operations Center and the security room to view critical, real-time information delivered in high-quality 1080p across multiple displays.

Secure, long distance data transmission
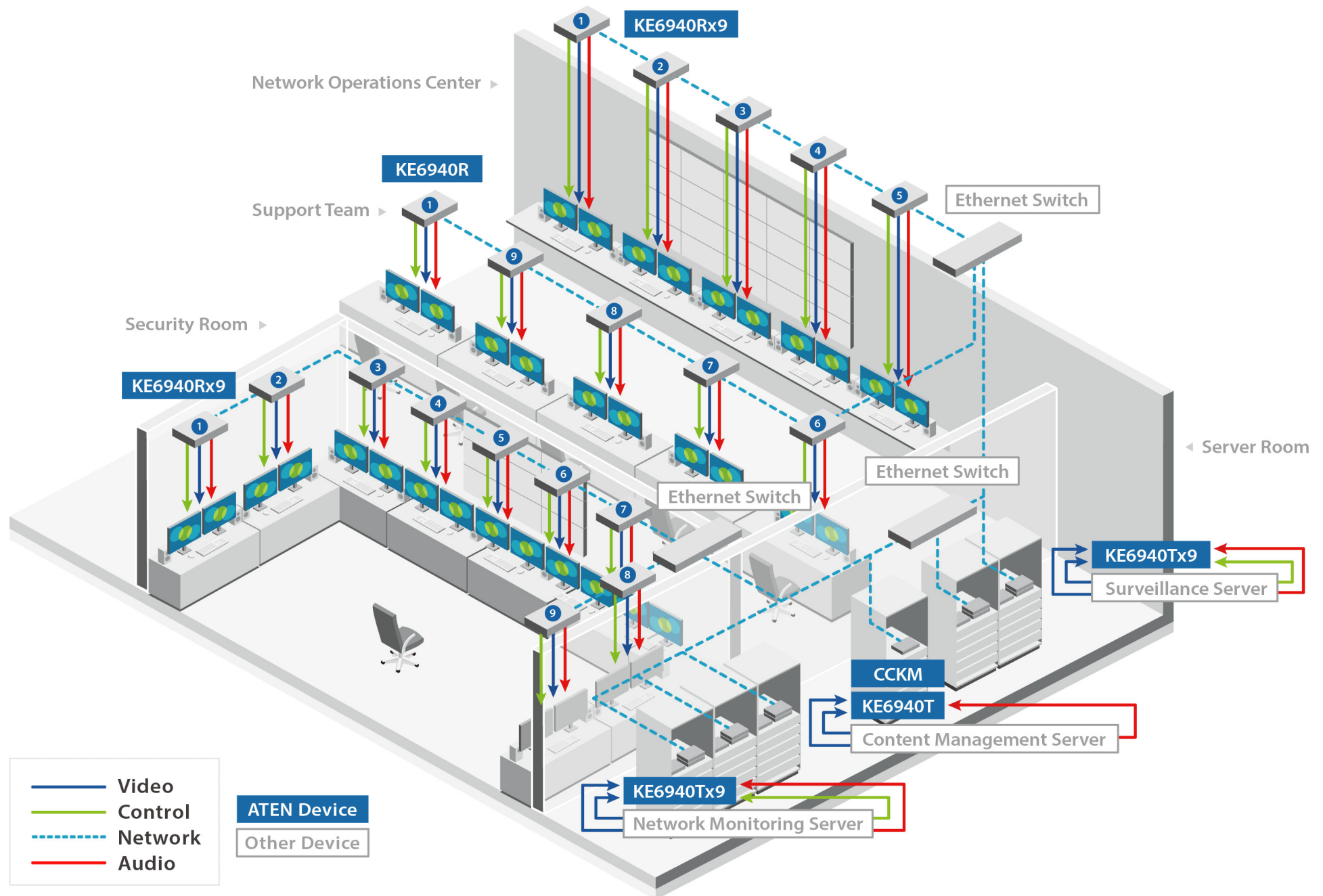
The KE6900 Series utilizes AES-128 bit encryption to secure all data before it is transmitted over a long distance network and decrypts the data on the receiver unit. This ensures Levira's critical information cannot be hijacked by unauthorized users. The support for long distance transmissions also ensures that access to the server room can be restricted.

KE6940T

KE6940R

Perspective Diagram

ATEN

KE6940Rx9

Network Operations Center ▶

KE6940R

Support Team ▶

Security Room ▶

KE6940Rx9

Ethernet Switch

Server Room ▶

Ethernet Switch

Ethernet Switch

KE6940Tx9
Surveillance Server

CCKM
KE6940T
Content Management Server

KE6940Tx9
Network Monitoring Server

Video
Control
Network
Audio

ATEN Device
Other Device

Solution Architecture Diagram (Video / Audio Connection)

Security Room

Monitor — Monitor — Alarm Speaker

DVI

Audio

KVM over IP Receiver
KE6940R x9

Network Operations Center

Monitor — Monitor — Alarm Speaker

DVI

Audio

KVM over IP Receiver
KE6940R x9

Support Team

Monitor — Monitor — Alarm Speaker

DVI

Audio

KVM over IP Receiver
KE6940R x1

Server Room

KVM over IP Transmitter
KE6940T

DVI
DVI
3.5mm Audio

Surveillance Server

KVM over IP Transmitter
KE6940T

DVI
DVI
3.5mm Audio

Network Monitoring Server

x18

KVM over IP Transmitter
KE6940T

DVI
DVI
3.5mm Audio

Content Management Server

Legend

ATEN Device

Other Device

Video
Audio
Control
Power
Network

Solution Architecture Diagram (Control / Network Connection)

Security Room

Keyboard Mouse — USB — **x9** KVM over IP Receiver *KE6940R* — Cat 6 — Ethernet Switch Juniper EX3300

Network Operations Center

Keyboard Mouse — USB — **x9** KVM over IP Receiver *KE6940R* — Cat 6 — Ethernet Switch Juniper EX3300

Support Team

Keyboard Mouse — USB — **x1** KVM over IP Receiver *KE6940R* — Cat 6

Server Room

10Gbps Fiber — Cat 6 — KVM over IP Transmitter *KE6940T* — USB — Surveillance Server

x18

10Gbps Fiber — Cat 6 — KVM over IP Transmitter *KE6940T* — USB — Network Monitoring Server

Ethernet Switch Juniper EX3300

Data Center

Cat 6 — Matrix Manager Server *CCKM*

Legend

- ATEN Device
- Other Device
- Video
- Audio
- Control
- Power
- Network

Product

KE6940
DVI-I Dual Display KVM over IP Extender

- Remotely access computers securely on your KVM installation via intranet

- Supports two DVI displays at each end
- Superior video quality – up to 1920 x 1200 @ 60 HZ

CCKM
Matrix Manager

- Centralized control of all your KE6900 / 6940 devices
- User account authentication and management

- Profiles can save reserved connections for broadcasting

ATEN

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